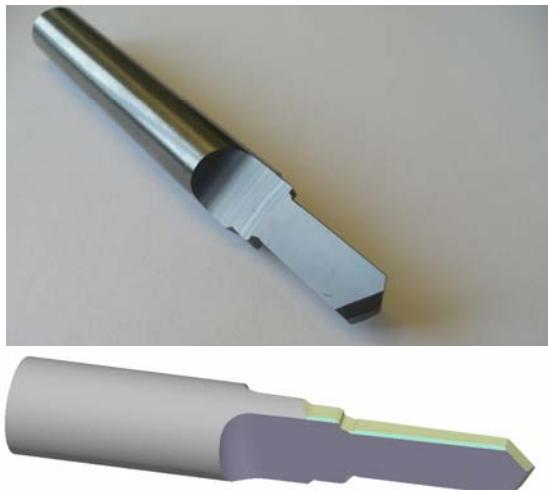


Form "Lanzenbohrer" Ø12 Z2

A06-100

The form spade drill is ground from a cylindrical carbide blank. The plunge roughing operation using a 1A1 wheel for pregrinding the tapered blade is the key operation for a stable production over large batches of tools. The DXQ Profiledefinition allows an easy separation of cutting and cylindrical ground parts along the profile.



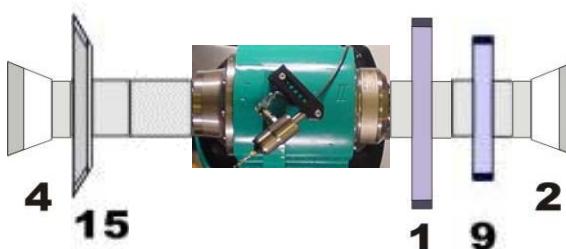
1. Cycletime for Production

Tool specifications							
Material HM	Diameter 12 mm, Cutting edges 2, Length of cutting edge 35 mm, Shear angle 1 deg	Probe	Spade rough.	Spade fin.	Gashing	Prf Rough	Prf Pregr
Operations							
Feed [mm/Min]	2000	50	300	150	80	70	90
Power [kW]		2	1	2	2	1	1
Cutting feed [m/s]		18	22	22	22	24	24
Used wheels							
Grinding time [s]	18	381	156	34	150	75	57
Total cycle time	18 Min 12						

The mentioned cycle times are indicative. The material to be ground, different grinding wheels or other coolants can influence the cycle times considerably.

2. Used Grinding Wheels

9 Ø100 1A1 D64
1 Ø125 1A1 D64
15 Ø125 1V1 D64
4 Ø75 11V9 D64
2 Ø75 12A2 D35



3. Machine and Software Requirements

Machines: 5 axes CNC grinders : CORVUS GDS, GEMINI DMR, NORMA CFG
Control: Fanuc 31i
Coolant: Synthetic Oil, pressure 6 - 7 bar
Software: Quinto 5

responsible engineer: OP, 25.2.07

www.schneeberger.ch

J. SCHNEEBERGER Maschinen AG 4914 Roggwil Switzerland

Subsidiaries in: France, Deutschland, Italia, United States, China

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